



INTRODUCTION

1. MICRO ECONOMICS: It is a study of behaviour of individual units of an economy such as individual consumer, producer etc.

2. ECONOMY: An economy is a system by which people get their living.

3. PRODUCTION POSSIBILITY CURVE (PPC): PP curve shows all the possible combination of two goods that can be produced with the help of available resources and technology.

4. MARGINAL OPPORTUNITY COST: MOC of a particular good along PPC is the amount of other good which is sacrificed for production of additional unit of another good.

5. MARGINAL RATE OF TRANSFORMATION: MRT is the ratio of units of one good sacrificed to produce one more unit of other good.

DEMAND

Demand:- Quantity of the commodity that a consumer is able and willing to purchase in a given period and at a given price.

Demand Schedule:- It is a tabular representation which shows the relationship between price of the commodity and quantity purchased.

Demand Curve:- It is a graphical representation of demand schedule.

Individual Demand:- Demand by an individual consumer.

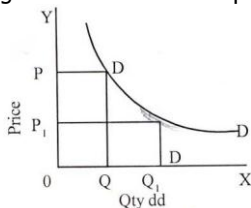
Factors Affecting Individual Demand For a Commodity/ Determinants of Demand:-

1. Price of the commodity itself
2. Income of the consumer
3. Price of related goods
4. Taste and Preference
5. Expectations of future price change

Demand Function:-

$$D_x = f(P_x, Y, P_r, T)$$

Law of Demand:- Other things remain constant, demand of a good falls with rise in price and vice versa.



Changes in Demand:-

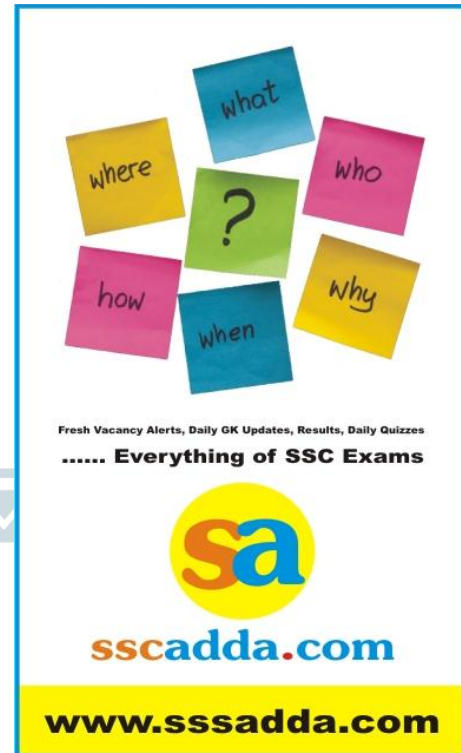
They are of two types:

- 1) Change in Quantity Demanded (Movement along the same demand curve)
- 2) Change in Demand (Shifts in demand)

1) Change in Quantity Demanded: -

Demand changes due to change in price of the commodity alone, other factors remain constant; are of two types;

- A) Expansion of demand : More demand at a lower price
- B) Contraction of demand : Less demand at a higher price



Change in Quantity Demanded

Due to price change → Movement will take place →
→ Extension and contraction

Change in Demand

Due to other than price change → Shifting will take place
→ Increase and decrease

Change in demand:-

Demand changes due to change in factors other than price of the commodity, are of two types:

- A) **Increase in demand:-** more demand due to change in other factors, price remaining constant.
- B) **Decrease in demand:-** less demand due to change in other factors, price remaining constant.

Causes of Increase in Demand:-

1. Increase in Income.
2. Increase/ favorable change in taste and preference.
3. Rise in price of substitute good.
4. Fall in price of complementary good.

Note: Increase in income causes increase in demand for normal good

Causes of Decrease in Demand:

1. Decrease in Income.
2. Unfavorable/Decrease in taste and preference
3. Decrease in price of substitute good.
4. Rise in price of complementary good.

Note: Decrease in income causes Decrease in demand for normal good

Type of Goods

Substitute Goods:- Increase in the price of one good causes increase in demand for other good. E.g., tea and Coffee

Complementary Goods:- Increase in the price of one good causes decrease in demand for other good. E.g:- Petrol and Car

Normal Good:- Goods which are having positive relation with income. It means when income rises, demand for normal goods also rises.

Inferior Goods:- Goods which are having negative relation with income. It means less demand at higher income and vice versa.

Normal goods - the quantity demanded of such commodities increases as the consumer's income increases and decreases as the consumer's income decreases. Such goods are called normal goods.

Giffen goods - a Giffen good is an inferior good which people consume more of as price rises, violating the law of demand.. In the Giffen good situation, cheaper close substitutes are not available. Because of the lack of substitutes, the income effect dominates, leading people to buy more of the good, even as its price rises.

Veblen good (aka ostentatious goods): Often confused with Giffen goods, Veblen goods are goods for which increased prices will increase quantity demanded. However, this is not because the consumers are forced into buying more of the good due to budgetary constraints (as in Giffen goods). Rather, Veblen goods are high-status goods such as expensive wines, automobiles, watches, or perfumes. The utility of such goods is associated with their ability to denote status. Decreasing their price decreases the quantity demanded because their status-denoting utility becomes compromised.

TYPES OF DEMAND

Cross demand: Demand primarily dependent upon prices of related goods is called cross demand. The complementary goods and substitutes are called related goods. In case of

complementary goods like pen and ink demand for good is inversely related to the prices of other goods but the case in substituting goods are just opposite. Demand for substituting goods is directly related to prices.

Income demand: Demand primarily dependent upon income is called income demand.

Direct demand: Demand for goods and services made by final consumers to satisfy their wants or needs is called direct demand. For example guest of hotels make the demand for food.

Derived demand: Demand for goods and services made according to direct demand is called derived demand.

Joint demand: Demand made for two or more goods and services to satisfy single need or want is called joint demand.

Composite demand: Demand for a single commodity made in order to use for different purposes is called composite demand.

Price Elasticity of Demand (Ed): Refers to the degree of responsiveness of quantity demanded to change in its price.

$Ed = \text{Percentage change in quantity demanded} / \text{Percentage change in price}$

$Ed = P/q \times \Delta q / \Delta p$

P = Original price Q = Original quantity Δ = Change

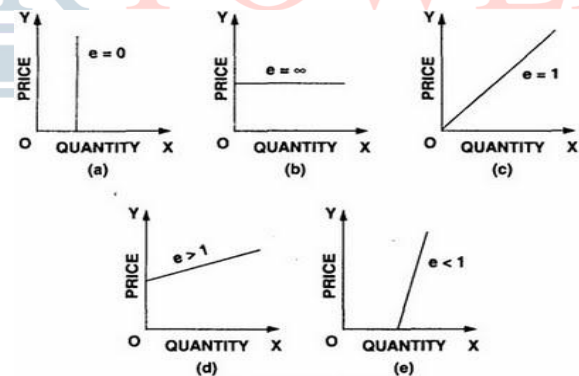


Fig. 2.14 (a) to (e)

Perfectly inelastic demand ($Ed = 0$)

This describes a situation in which demand shows no response to a change in price. In other words, whatever be the price the quantity demanded remains the same.

Inelastic (less elastic) demand ($e < 1$)

In this case the proportionate change in demand is smaller than in price.

Unitary elasticity demand ($e = 1$)

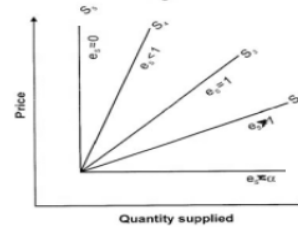
When the percentage change in price produces equivalent percentage change in demand, we have a case of unit elasticity. The rectangular hyperbola as shown in the figure demonstrates this type of elasticity.

Elastic (more elastic) demand ($e > 1$)

In case of certain commodities the demand is relatively more responsive to the change in price. It means a small change in price induces a significant change in demand.

Perfectly elastic demand ($e = \infty$)

This is experienced when the demand is extremely sensitive to the changes in price. In this case an insignificant change in price produces tremendous change in demand. The demand curve showing perfectly elastic demand is a horizontal straight line.




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Cross-elasticity of demand

The responsiveness of demand to changes in prices of related goods is called cross-elasticity of demand (related goods may be substitutes or complementary goods). In other words, it is the responsiveness of demand for commodity x to the change in the price of commodity y.

e_c = Percentage change in the quantity demanded of commodity X / Percentage change in the price of commodity y

Measures of cross-elasticity of demand

Infinity - Commodity x is nearly a perfect substitute for commodity y

Zero - Commodities x and y are not related.

Negative - Commodities x and y are complementary.

LAW OF SUPPLY

Supply means the goods offered for sale at a price during a specific period of time. It is the capacity and intention of the producers to produce goods and services for sale at a specific price. The supply of a commodity at a given price may be defined as the amount of it which is actually offered for sale per unit of time at that price.

The law of supply establishes a direct relationship between price and supply. Firms will supply less at lower prices and more at higher prices. "Other things remaining the same, as the price of commodity rises, its supply expands and as the price falls, its supply contracts".

Elasticity of Supply

The law of supply tells us that quantity supplied will respond to a change in price. The concept of elasticity of supply explains the rate of change in supply as a result of change in price. It is measured by the formula mentioned below

Elasticity of supply = Proportionate change in quantity supplied / Proportionate change in price

FORMS OF MARKET AND PRICE DETERMINATION

Market: Market is a place in which buyers and sellers come into contact for the purchase and sale of goods and services.

Market structure: refers to number of firms operating in an industry, nature of competition between them and the nature of product.

Types of market

a) Perfect competition. b) Monopoly.

c) Monopolistic Competition d) Oligopoly.

a) **Perfect competition:** refers to a market situation in which there are large number of buyers and sellers. Firms sell homogeneous products at a uniform price.

b) **Monopoly market:** Monopoly is a market situation dominated by a single seller who has full control over the price.

c) **Monopolistic competition:** It refers to a market situation in which there are many firms who sell closely related but differentiated products.

d) **Oligopoly:** is a market structure in which there are few large sellers of a commodity and large number of buyers.

Features of perfect competition:

1. Very large number of buyers and sellers.
2. Homogeneous product.
3. Free entry and exit of firms.
4. Perfect knowledge.
5. Firm is a price taker and industry is price maker.
6. Perfectly elastic demand curve ($AR=MR$)
7. Perfect mobility of factors of production.
8. Absence of transportation cost.
9. Absence of selling cost.

Features of monopoly:

1. Single seller of a commodity.
2. Absence of close substitute of the product.
3. Difficulty of entry of a new firm.
4. Negatively sloped demand curve ($AR > MR$)
5. Full control over price.
6. Price discrimination exists
7. Existence of abnormal profit.

Features of monopolistic competition

1. Large number of buyers and sellers but less than perfect competition.
2. Product differentiation.
3. Freedom of entry and exit.
4. Selling cost.
5. Lack of perfect knowledge.
6. High transportation cost.
7. Partial control over price.

Main features of Oligopoly.

1. Few dominant firms who are large in size
2. Mutual interdependence.
3. Barrier to entry.
4. Homogeneous or differentiated product.
5. Price rigidity.

Features of pure competition

1. Large number of buyers and sellers.
2. Homogeneous products.
3. Free entry and exit of firm.

What are selling cost?

Ans.: Cost incurred by a firm for the promotion of sale is known as selling cost. (Advertisement cost)

What is product differentiation?

Ans: It means close substitutes offered by different producers to show their output differs from other output available in the market. Differentiation can be in colour, size packing, brand name etc to attract buyers.

What do you mean by patent rights?

Ans:- Patent rights is an exclusive right or license granted to a company to produce a particular output under a specific technology.

What is price discrimination?

Ans: - It refers to charging of different prices from different consumers for different units of the same product.

PRODUCTION

Production: Combining inputs in order to get the output is production.

Production Function: It is the functional relationship between inputs and output in a given state of technology. $Q = f(L, K)$
 Q is the output, L : Labor, K : Capital

Fixed Factor: The factor whose quantity remains fixed with the level of output.

Variable Factor: Those inputs which change with the level of output.

PRODUCTION FUNCTION AND TIME PERIOD

1. Production function is a long period production function if all the inputs are varied.

2. Production function is a short period production function if few variable factors are combined with few fixed factors.

Concepts of product:

Total Product- Total quantity of goods produced by a firm / industry during a given period of time with given number of inputs.

Average product = output per unit of variable input.

$APP = TPP / \text{units of variable factor}$

Average product is also known as average physical product.

Marginal product (MP): refers to addition to the total product, when one more unit of variable factor is employed.

$MP_n = TP_n - TP_{n-1}$

MP_n = Marginal product of n th unit of variable factor

TP_n = Total product of n units of variable factor

TP_{n-1} = Total product of $(n-1)$ unit of variable factor.

n = no. of units of variable factor

$MP = \Delta TP / \Delta n$

We derive TP by summing up MP $TP = \Sigma MP$



SHORT RUN PRODUCTION FUNCTION LAW OF VARIABLE PROPORTION OR RETURNS TO A VARIABLE FACTOR

Statement of law of variable proportion: In short period, when only one variable factor is increased, keeping other factors constant, the total product (TP) initially increases at an increasing rate, then increases at a decreasing rate and finally TP decreases.

MPP initially increase then falls but remains positive then 3rd phase becomes negative.

Phase I / Stage I / Increasing returns to a factor.

- TPP increases at an increasing rate
- MPP also increases.

Phase II / Stage II / Diminishing returns to a factor

- TPP increases at decreasing rate
- MPP decreases / falls
- This phase ends when MPP is zero & TPP is maximum

Phase III / Stage III / Negative returns to a factor

- TPP diminishes / decreases
- MPP becomes negative.

Reasons for increasing returns to a factor

- Better utilization of fixed factor
- Increase in efficiency of variable factor.
- Optimum combination of factors

Reasons for diminishing returns to a factor

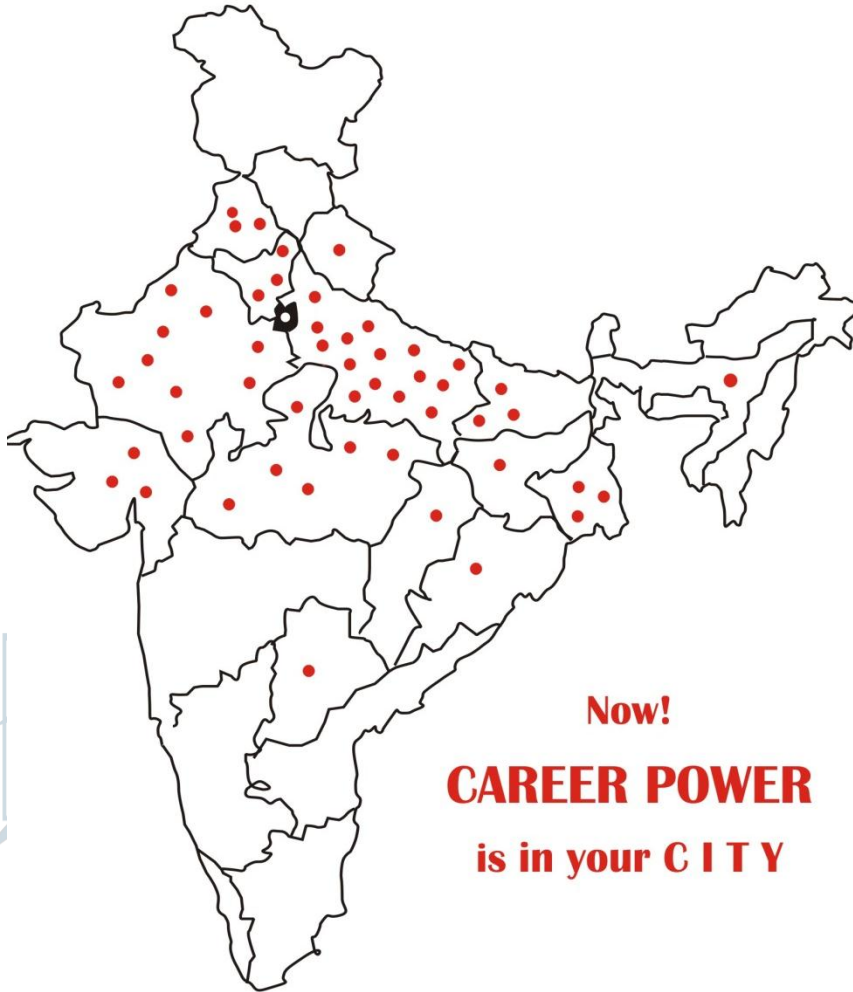
- Indivisibility of factors.
- Imperfect substitutes.

Reasons for negative returns to a factor

- Limitation of fixed factors
- Poor coordination between variable and fixed factor

- Decrease in efficiency of variable factors.

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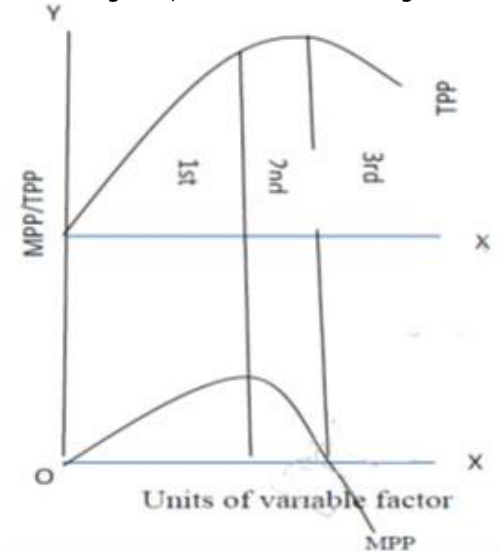
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Relation between MPP and TPP

- As long as MPP increases, TPP increases at an increasing rate.
- When MPP decreases, TPP increases diminishing rate.
- When MPP is Zero, TPP is maximum.
- When MPP is negative, TPP starts decreasing.



Long-run production function - Returns to Scale

In the long run, all factors can be changed. Returns to scale studies the changes in output when all factors or inputs are changed. An increase in scale means that all inputs or factors are increased in the same proportion.

Three phases of returns to scale

The changes in output as a result of changes in the scale can be studied in 3 phases. They are

- Increasing returns to scale
- Constant returns to scale
- Decreasing returns to scale

Increasing returns to scale

If the increase in all factors leads to a more than proportionate increase in output, it is called increasing returns to scale. For example, if all the inputs are increased by 5%, the output increases by more than 5% i.e. by 10%. In this case the marginal product will be rising.

Constant returns to scale

If we increase all the factors (i.e. scale) in a given proportion, the output will increase in the same proportion i.e. a 5% increase in all the factors will result in an equal proportion of 5% increase in the output. Here the marginal product is constant.

Decreasing returns to scale

If the increase in all factors leads to a less than proportionate increase in output, it is called decreasing returns to scale i.e. if all the factors are increased by 5%, the output will increase by less than 5% i.e. by 3%. In this phase marginal product will be decreasing.

The Cobb – Douglas Production Function

The simplest and the most widely used production function in economics is the Cobb-Douglas production function. It is a statistical production function given by professors C.W. Cobb and P.H. Douglas.

The Cobb-Douglas production function can be stated as follows $Q = bL^aC^{1-a}$ in which

Q = Actual output **L** = Labour **C** = Capital **b** = number of units of Labour **a** = Exponent of labour **1-a** = Exponent of Capital

According to the above production function, if both factors of production (labour and capital) are increased by one percent, the output

(total product) will increase by the sum of the exponents of labour and capital i.e. by $(a+1-a)$. Since $a+1-a=1$, according to the equation, when the inputs are increased by one percent, the output also increases by one percent. Thus the Cobb Douglas production function explains only constant returns to scale.

In the above production function, the sum of the exponents shows the degree of "returns to scale" in production function.

$a + b > 1$: Increasing returns to scale

$a + b = 1$: Constant returns to scale

$a + b < 1$: Decreasing returns to scale

COST

Cost of production : Expenditure incurred on various inputs to produce goods and services.

Cost function : Functional relationship between cost and output.

$C=f(q)$ Where f =functional relationship where c = cost of production q =quantity of product


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Money cost : Money expenses incurred by a firm for producing a commodity or service.

Explicit cost : Actual payment made on hired factors of production. For example wages paid to the hired labourers, rent paid for hired accommodation, cost of raw material etc.

Implicit cost : Cost incurred on the self - owned factors of production. For example, interest on owners capital, rent of own building, salary for the services of entrepreneur etc.

Opportunity cost : is the cost of next best alternative foregone / sacrificed.

Fixed cost : are the cost which are incurred on the fixed factors of production. These costs remain fixed whatever may be the scale of output. These costs are present even when the output is zero. These costs are present in short run but disappear in the long run.

Total Variable Cost : TVC or variable cost – are those costs which vary directly with the variation in the output. These costs are incurred on the variable factors of production. These costs are also called “prime costs”, “Direct cost” or “avoidable cost”. These costs are zero when output is zero.

Total cost : is the total expenditure incurred on the factors and non-factor inputs in the production of goods and services. It is obtained by summing TFC and TVC at various levels of output.

Relation between TC, TFC and TVC

1. TFC is horizontal to x axis.
2. TC and TVC are S shaped (they rise initially at a decreasing rate, then at a constant rate & finally at an increasing rate) due to law of variable proportions.
3. At zero level of output TC is equal to TFC.
4. TC and TVC curves parallel to each other.

Average variable cost is the cost per unit of the variable cost of production. $AVC = TVC / \text{output}$.

AVC falls with every increase in output initially.

Once the optimum level of output is reached AVC starts rising.

Average total cost (ATC) or Average cost (AC): refers to the per unit total cost of production.

Marginal cost: refers to the addition made to total cost when an additional unit of output is produced.

$MC_n = TC_n - TC_{n-1}$ or $MC = \Delta TC / \Delta Q$ **Note : MC is not affected by TFC.**

Relationship between AC and MC

- Both AC & MC are derived from TC
- Both AC & MC are “U” shaped (Law of variable proportion)
- When AC is falling MC also falls & lies below AC curve.
- When AC is rising MC also rises & lies above AC
- MC cuts AC at its minimum where $MC = AC$

Revenue

Revenue:- Money received by a firm from the sale of a given output in the market.

Total Revenue: Total sale receipts or receipts from the sale of given output.

$TR = \text{Quantity sold} \times \text{Price (or) output sold} \times \text{price}$

Average Revenue: Revenue or Receipt received per unit of output sold.

- $AR = TR / \text{Output sold}$

- AR and price are the same.
- $TR = \text{Quantity sold} \times \text{price or output sold} \times \text{price}$
- $AR = (\text{output} / \text{quantity} \times \text{price}) / \text{Output/ quantity}$
- $AR = \text{price}$
- AR and demand curve are the same. Shows the various quantities demanded at various prices.

Marginal Revenue: Additional revenue earned by the seller by selling an additional unit of output.

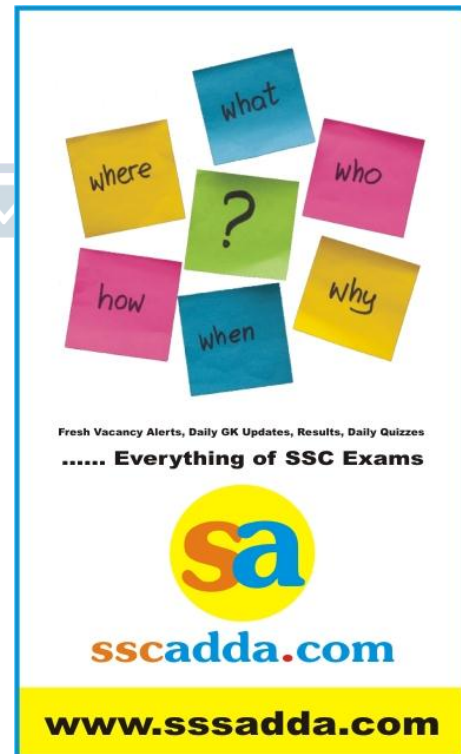
• $MR_n = TR_n - TR_{n-1}$ • $TR = \sum MR$

Relationship between AR and MR (when price remains constant or perfect competition)

Under perfect competition, the sellers are price takers. Single price prevails in the market. Since all the goods are homogeneous and are sold at the same price $AR = MR$. As a result AR and MR curve will be horizontal straight line parallel to OX axis. (When price is constant or perfect competition)

Relation between TR and MR (When price remains constant or in perfect competition)

When there exists single price, the seller can sell any quantity at that price, the total revenue increases at a constant rate (MR is horizontal to X axis)



Relationships between AR and MR under monopoly and monopolistic competition (Price changes or under imperfect competition)

- AR and MR curves will be downward sloping in both the market forms.
- AR lies above MR.
- AR can never be negative.

- AR curve is less elastic in monopoly market form because of no substitutes.
- AR curve is more elastic in monopolistic market because of the presence of substitutes.

Relationship between TR and MR. (When price falls with the increase in sale of output)

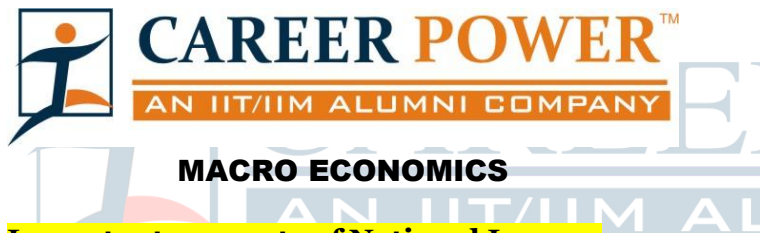
- Under imperfect market AR will be downward sloping – which shows that more units can be sold only at a less price.
- MR falls with every fall in AR / price and lies below AR curve.
- TR increases as long as MR is positive.
- TR falls when MR is negative.
- TR will be maximum when MR is zero

Break-even point: It is that point where $TR = TC$ or $AR = AC$. Firm will be earning normal profit.

Shut down point : A situation when a firm is able to cover only variable costs or $TR = TVC$

Formulae at a glance:

- $TR = \text{price or } AR \times \text{Output sold or } TR = \sum MR$
- $AR (\text{price}) = TR \div \text{units sold}$
- $MR_n = MR_n - MR_{n-1}$



Important concepts of National Income

1. Gross Domestic Product at Market Price.
2. Gross National Product at Market Price.
3. Net Domestic Product at Market Price.
4. Net National Product at Market Price.
5. Net Domestic Product at Factor Cost.
6. Net National Product at Factor Cost.
7. Gross Domestic Product at Factor Cost.
8. Gross National Product at Factor Cost.
9. Private Income.
10. Personal Income
11. Disposable Income.

(1) Gross Domestic Product at Market Price (GDP at MP):-

Gross domestic product at market price is the aggregate money value of the final goods and services produced within the country's own territory. So as to calculate GDP at MP all goods and services produced in the domestic territory are multiplied by their respective prices. Symbolically $GDP \text{ at MP} = \sum PQ$. Where P is market price and Q is final goods and services.

(2) Gross National Product of Market Price (GNP at MP):-

Gross national product at market price is broad and comprehensive concept. GNP at MP measures the money value of all the final products produced annually in a country plus net factor income from abroad. In short GNP is GDP plus net

factor incomes earned from abroad. Net factor incomes is derived by reducing the factor incomes earned by foreigners from the country, in question from the factor incomes earned by the residents of that country from abroad.

(3) Net Domestic Product at Market Price (NDP at MP):-

Net domestic product- at market price is the difference between Net National Product at market price and net factor income from abroad. Net domestic product at market price is the difference between GNP at market price minus depreciation and net factor incomes from abroad.

(4) Net National Product at Market Price (NNP at MP):-

Net National product measures the net money value of final goods and services at current prices produced in a year in a country. It is the gross national product at market price less depreciation. In production of output capital assets are constantly used up. This fixed capital consumption is called depreciation. Depreciation constitutes loss of value of fixed capital. Thus net national product is the net money value of final goods and services produced in the course of a year. Net money value can be arrived at by excluding depreciation allowance from total output.

(5) Net Domestic Product at Factor Cost (NDP at FC):-

Net Domestic product of factor cost or domestic income is the income earned by all the factors of production within the domestic territory of a country during a year in the form of wages, interest, profit and rent etc. Thus NDP at FC is a territorial concept. In other words NDP at factor cost is equal to NNP at FC less net factor income from abroad.

(6) Net National Product at Factor Cost (NNP at FC)

Net national product at factor cost is the aggregate payments made to the factors of production. NNP at FC is the total incomes earned by all the factors of production in the form of wages, profits, rent, interest etc. plus net factor income from abroad. NNP at FC is the NDP at FC plus net factor income from abroad. NNP at FC can also be derived by excluding depreciation from GNP at FC.

(7) Gross Domestic Product at Factor Cost (GDP at FC):

Gross Domestic Product at factor cost refers to the value of all the final goods and services produced within the domestic territory of a country. If depreciation or consumption of fixed capital is added to the net domestic product at factor cost, it is called Gross domestic Product at Factor cost.

(8) Gross National Product at Factor Cost (GNP at FC):-

Gross national product at factor cost is obtained by deducting the indirect tax and adding subsidies to GNP at market price or Gross national Product at factor cost is obtained by adding net factor incomes from abroad to the GDP at factor cost.

(9) Private Income:-

Private income means the income earned by private individuals from any source whether productive or unproductive. It can be arrived at from NNP at factor cost by making certain additions and deduction. The additions include (a) transfer earnings

from Govt, (b) interest on national debt (c) current transfers from rest of the world. The deductions include (a) Income from property and entrepreneurship (b) savings of the non-departmental undertakings (e) social security contributions. In order to arrive at private income the above additions and subtraction are to be made to and from NNP at factor Cost.

(10) Personal Income:-

Personal Income is the total income received by the individuals of country from all sources before direct taxes. Personal income is not the same as National Income, because personal income includes the transfer payments where as they are not included in national income. Personal income includes the wages, salaries, interest and rent received by the individuals. Personal income is derived by excluding undistributed corporate profit taxes etc. from National Income.

(11) Disposable Income:-




Disposable income means the actual income which can be spent on consumption by individuals and families. It refers to the purchasing power of the house hold. The whole of disposable income is not spent on consumptions; a part of it is paid in the form of direct tax. Thus disposable income is that part of income, which is left after the exclusion of direct tax.

Concepts

- $NNP_{Mp} = GNP_{mp} - \text{depreciation}$
- $NDP_{Mp} = GDP_{mp} - \text{depreciation}$
- $NDP_{Fc} = NDP_{mp} - \text{Net indirect taxes (indirect tax - subsidies)}$
- $GDP_{Fc} = NDP_{fc} + \text{depreciation}$
- $NNP_{Fc} = GDP_{mp} - \text{depreciation} + \text{Net factor income from abroad} - \text{Net indirect taxes}$

Define nominal GNP

Ans. GNP measured in terms of current market prices is called nominal GNP.


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Define Real GNP.

Ans. GNP computed at constant prices (base year price) is called real GNP.

Factor Payment: Factor payment is a payment made in lieu of providing goods and services. A worker gets the wages is the factor payment because he worked for it.

Transfer payment: If there is no obligation involved to deliver service or goods in return of the payments is called transfer payment. Examples are: donation, old age pension, unemployment benefit, scholarship etc.

METHODS OF CALCULATING NATIONAL INCOME

I - PRODUCT METHOD (Value added method):

- $\text{Sales} + \text{change in stock} = \text{value of output}$
- $\text{Change in stock} = \text{closing stock} - \text{opening stock}$
- $\text{Value of output} - \text{Intermediate consumption} = \text{Gross value added (GDPMP)}$
- $NNP_{Fc} (N.I) = GDP_{Mp} (-) \text{consumption of fixed capital (depreciation)}$
- $(+) \text{Net factor income from abroad } (-) \text{Net indirect tax.}$

Income method:

1. Compensation of employees.

2. Operating surplus.

Income from property- Rent & Royalty Interest
 Income from Entrepreneurship- Profit, Corporate dividend, Tax Savings (Net retained earnings)

3. Mixed income of self-employed.

- $NDP_{fc} = (1) + (2) + (3)$
- $NNP_{fc} = NDP_{fc} (+) \text{Net factor income from abroad}$
- $GNP_{mp} = NDP_{fc} + \text{consumption of fixed capital} + \text{Net indirect tax (Indirect tax - subsidy)}$

Expenditure method:

1. Government final consumption expenditure.
 2. Private final consumption expenditure.
 3. Net Export.
 4. $\text{Gross domestic capital formation} = \text{Gross Domestic fixed Capital formation} + \text{Change in stock}$
- $GDP_{Mp} = (1) + (2) + (3) + (4)$
 $NNP_{fc} = GDP_{Mp} - \text{consumption of fixed capital} + NFIA - \text{Net indirect taxes}$
 Note: If capital formation is given as Net domestic capital formation we arrive at NDP_{Mp} . Capital formation = Investment

INTRODUCTION TO MACRO

Autonomous consumption: The consumption which does not depend upon income or the amount of consumption expenditure when income is zero.

Autonomous Investments: It is Investment which is made irrespective of level of income. It is generally run by the government sector. It is income inelastic. The volume of autonomous investment is same at all level of income.

Investment multipliers and its working.

Investment multiplier explains the relationship between increase in investment and the resultant increase in income. Investment multiplier is the ratio of change in income to change in investment. Multiplier (k) $= \Delta y / \Delta I$.

The value of multiplier depends on the value of marginal propensity to consume (MPC).
There is direct relationship between k and MPC.

INFLATION TYPES

Comprehensive Inflation: When the prices of all commodities rise throughout the economy.

Sporadic Inflation: When prices of only few commodities in few regions (areas) rise. It is sectional in nature.

Open Inflation: When government does not attempt to restrict inflation, it is known as Open Inflation. In a free market economy, where prices are allowed to take its own course, open inflation occurs.

Suppressed Inflation: When government prevents price rise through price controls, rationing, etc., it is known as Suppressed Inflation. It is also referred as Repressed Inflation.

Hyperinflation: Hyperinflation refers to a situation where the prices rise at an alarming high rate. The prices rise so fast that it becomes very difficult to measure its magnitude. However, in quantitative terms, when prices rise above 1000% per annum (quadruple or four digit inflation rate), it is termed as Hyperinflation.

Deficit Inflation: Deficit inflation takes place due to deficit financing.

Credit Inflation: Credit inflation takes place due to excessive bank credit or money supply in the economy.

Scarcity Inflation: Scarcity inflation occurs due to hoarding. Hoarding is an excess accumulation of basic commodities by unscrupulous traders and black marketers.

Profit Inflation: When entrepreneurs are interested in boosting their profit margins, prices rise.

Demand-Pull Inflation: Inflation which arises due to various factors like rising income, exploding population, etc., leads to aggregate demand and exceeds aggregate supply, and tends to raise prices of goods and services. This is known as Demand-Pull or Excess Demand Inflation.

Cost-Push Inflation: When prices rise due to growing cost of production of goods and services, it is known as Cost-Push (Supply-side) Inflation. For e.g. If wages of workers are raised then the unit cost of production also increases. As a result, the prices of end-products and end-services being produced and supplied are consequently hiked.

Money supply

The Reserve Bank of India (RBI) is the central bank of our country. It manages the monetary system of our country. It has classified the money supply of our country into four components.

They are :

$M1$ = Currency with the public. It includes coins and currency notes + demand deposits of the public. $M1$ is also known as narrow money ;

$M2$ = $M1$ + post office savings deposits ;

$M3$ = $M1$ + Time deposits of the public with the banks. $M3$ is also known as broad money ; and

$M4$ = $M3$ + total post office deposits.

Note: Besides savings deposits, people maintain fixed deposits of different maturity periods with the post office.

Fiat Money: Currency notes in circulation are normally referred to as fiat money. For example, one Rupee notes issued by the Government of India is Fiat money. The notes issued by the RBI are usually referred to as bank notes. They are in the nature of promissory notes.

TAX STRUCTURE IN INDIA

Taxes are the amount of money government imposes on an individual or corporates directly or indirectly so as to generate revenue or to keep in check any black money activities in India.

The tax on incomes, customs duties, central excise and service tax are levied by the Central Government. The state Government levies agricultural income tax (income from plantations only), Value Added Tax (VAT)/ Sales Tax, Stamp Duty, State Excise, Land Revenue, Luxury Tax and Tax On Professions. The local bodies have the authority to levy tax on properties, octroi/entry tax and tax for utilities like water supply, drainage etc.

DIRECT TAXES-

These taxes are levied directly on the persons. These contribute major chunk of the total taxes collected in India.

INCOME TAX-

This is a type of tax levied on the individuals whose income falls under the taxable category (2.5 lakhs per annum).

The Indian Income Tax Department is governed by CBDT and is part of the Department of Revenue under the Ministry of Finance, Govt. of India.

Corporate Income Tax -

This is the tax levied on the profits a corporate house earned in a year. In India, the Corporate Income tax rate is a tax collected from companies.

Securities Transaction Tax-

Introduced in 2004, STT is levied on the sale and purchase of equities (ie Shares, Debentures or any other security). More clearly, The income an individual generates through the securities market be it through reselling of shares or through debentures is taxed by the government of India and the same tax is called as Securities Transaction Tax.

Banking Cash Transaction Tax -

A bank transaction tax is a tax levied on debit (and/or credit) entries on bank accounts. It can be automatically collected by a central counterparty in the clearing or settlement process.

Capital Gains Tax:-

Capital Gain tax as name suggests it is tax on gain in capital. If you sale property, shares, bonds & precious material etc. and earn profit on it then you are supposed to pay capital gain tax.

- **PROPERTY TAX**
- **GIFT TAX**
- **HOUSE TAX**
- **PROFESSIONAL TAX**
- **DTC**

INDIRECT TAXES-

You go to a super market to buy goods or to a restaurant to have a mouthful there at the time of billing you often see yourself robbed by some more amount than what you enjoyed of, these extra amounts are indirect taxes, which are collected by the intermediaries and when govt tax the income of the intermediaries this extra amount goes in to government's kitty, hence as the name suggests these are levied indirectly on common people.

Indirect Taxes:-

- SALES TAX
- VAT(VALUE ADDED TAX)
- CUSTOM DUTY
- OCTROI
- EXCISE DUTY
- ANTI DUMPING DUTY
- ENTERTAINMENT TAX
- TOLL TAX
- SERVICE TAX
- GST-GOODS & SERVICE TAX

Value Added Tax-

When we pay an extra amount of price for the goods and services we consume or buy, that extra amount of money is called as VAT. This taxes is about to be replaced by Goods and Services Tax.

Customs Duty –

Customs Duty is a type of indirect tax levied on goods imported into India as well as on goods exported from India. In India, the basic law for levy and collection of customs duty is Customs Act, 1962. It provides for levy and collection of duty on imports and exports.

Service Tax-

Service Tax is a tax imposed by Government of India on services provided in India. The service provider collects the tax and pays the same to the government. It is charged on all services except the services in the negative list of services.

Sales Tax :-

Sales tax charged on the sales of movable goods.

Custom duty & Octroi (On Goods):-

Custom Duty is a type of indirect tax charged on goods imported into India. One has to pay this duty, on goods that are imported from a foreign country into India

Octroi is tax applicable on goods entering from one state to another for consumption or sale. In simple terms one can call it as Entry Tax.

Excise Duty:-

An excise duty is a type of tax charged on goods produced within the country. Another name of this tax is CENVAT (Central Value Added Tax).

GOVERNMENT BUDGET AND THE ECONOMY

1. Define a Budget.

Ans: It is an annual statement of the estimated Receipts and Expenditures of the Government over the fiscal year which runs from April –I to March 31.

2. Name the two broad divisions of the Budget.

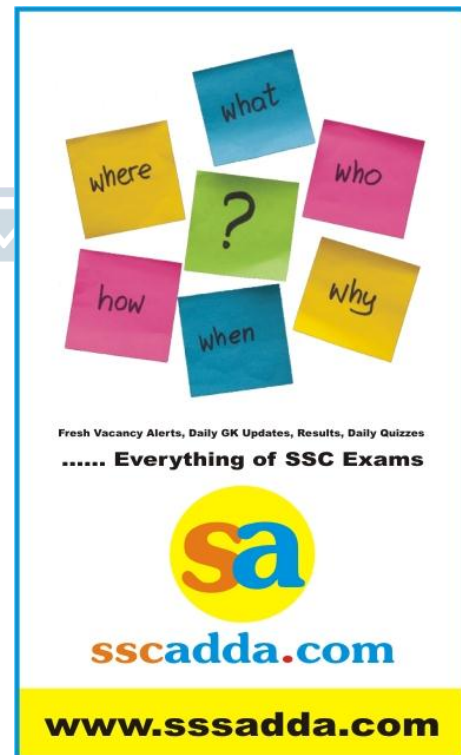
Ans: i) Revenue Budget ii) Capital Budget

3. What are the two Budget Receipts?

Ans: i) Revenue Receipts ii) Capital Receipts

4. Name the two types of Revenue Receipts.

Ans: i) Tax Revenue ii) Non-tax Revenue



5. What are the two types of taxes?

Ans: a) Direct Taxes: i) Income Tax, ii) Interest Tax, iii) Wealth Tax
b) Indirect Taxes: i) Customs duties, ii) Excise duties, iii) Sales Tax

6. What are the main items of Capital Receipts?

Ans: a) Market Loans (loans raised by the government from the public)
b) Borrowings by the Government

c) Loans received from foreign governments and International financial Institutions.

7. Give two examples of Developmental Expenditure.

Ans: Plan expenditure of Railways and Posts

8. Give two examples of Non-Developmental expenditures.

Ans: i) Expenditure on defence
ii) Interest payments

9. Define Surplus Budget.

Ans: A Surplus Budget is one where the estimated revenues are greater than the Estimated expenditures.

10. What are the four different concepts of Budget Deficits?

Ans: a) Budget Deficit b) Revenue Deficit
c) Primary Deficit and d) Fiscal Deficit

BUDGET

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a) Budget Deficit b) Revenue Deficit
c) Primary Deficit and d) Fiscal Deficit

What do you mean by Revenue Expenditure and Capital Expenditure?

i) Revenue Expenditure :- It is the expenditure incurred for the normal running of government departments and provision of various services like interest charges on debt, subsidies etc.,

ii) Capital Expenditure:- It consists mainly of expenditure on acquisition of assets like land, building, machinery, equipment etc., and loans and advances granted by the Central Government to States & Union Territories.

Explain the four different concepts of Budget deficit.

These are the four different concepts of Budget Deficit.

a) Budget Deficit:- It is the difference between the total expenditure, current revenue and net internal and external capital receipts of the government.

Formulae: $B.D = B.E - B.R$ (B.D= Budget Deficit, B.E. Budget Expenditure B.R= Budget Revenue)

b) Fiscal Deficit:- It is the difference between the total expenditure of the government, the revenue receipts PLUS those capital receipts which finally accrue to the government.

Formulae: $F.D = B.E - B.R$ (B.E > B.R. other than borrowings) F.D=Fiscal Deficit, B.E= Budget Expenditure, B.R. = Budget Receipts.

c) Revenue Deficit: - It is the excess of governments revenue expenditures over revenue receipts.

Formulae: $R.D = R.E - R.R$, When $R.E > R.R$, R.D= Revenue Deficit, R.E= RevenueExpenditure, R.R. = Revenue Receipts.

d) Primary Deficit: - It is the fiscal deficit **MINUS** Interest payments. **Formulae:** $P.D = F.D - I.P$, P.D= Primary Deficit, F.D= Fiscal Deficit, I.P= Interest Payment.

BALANCE OF PAYMENTS: MEANING AND COMPONENTS

Meaning: The balance of payments of a country is a systematic record of all economic transactions between residents of a country and residents of foreign countries during a given period of time.

BALANCE OF TRADE AND BALANCE OF PAYMENTS

Balance of trade: Balance of trade is the difference between the money value of exports and imports of material goods (visible item)

Balance of payments: Balance of payments is a systematic record of all economic transactions between residents of a country and the residents of foreign countries during a given period of time. It includes both visible and invisible items. Hence the balance of payments represents a better picture of a country's economic transactions with the rest of the world than the balance of trade.

STRUCTURE OF BALANCE OF PAYMENT ACCOUNTING

A balance of payments statement is a summary of a Nation's total economic transaction undertaken on international account. There are two types of account.

1. Current Account: It records the following 03 items.

a) Visible items of trade: The balance of exports and imports of goods is called the balance of visible trade.

b) Invisible trade: The balance of exports and imports of services is called the balance of invisible trade. E.g. Shipping insurance etc.

c) Unilateral transfers: Unilateral transfers are receipts which residents of a country receive (or) payments that the residents of a country make without getting anything in return e.g. gifts. The net value of balances of visible trade and of invisible trade and of unilateral transfers is the balance on current account.

2. **CAPITAL ACCOUNT:** It records all international transactions that involve a resident of the domestic country changing his assets with a foreign resident or his liabilities to a foreign resident.

EXCHANGE

1. Define foreign exchange rate.

Ans: Foreign exchange rate is the rate at which currency of one country can be exchanged for currency of another country.

2. What do you mean by Foreign Exchange Market?

Ans: The foreign exchange market is the market where international currencies are traded for one another.

3. What is meant by Fixed Exchange Rate?

Ans: Fixed Rate of exchange is a rate that is fixed and determined by the government of a country and only the government can change it.

4. What is equilibrium rate of exchange?

Ans: Equilibrium exchange rate occurs when supply of and demand for foreign exchange are equal to each other.

5. Define flexible exchange rate.

Ans: Flexible rate of exchange is that rate which is determined by the demand and supply of different currencies in the foreign exchange market.

6. What is meant by appreciation of currencies?

Ans: Appreciation of a currency occurs when its exchange value in relation to currencies of other country increases.

7. Define Spot exchange rate.

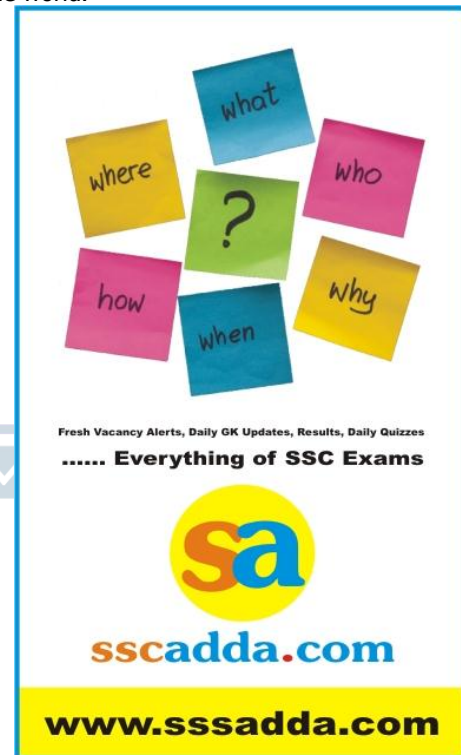
Ans: The spot exchange rate refers to the rate at which foreign currencies are available on the spot.

8. Define forward market.

Ans: Market for foreign exchange for future delivery is known as the forward market.

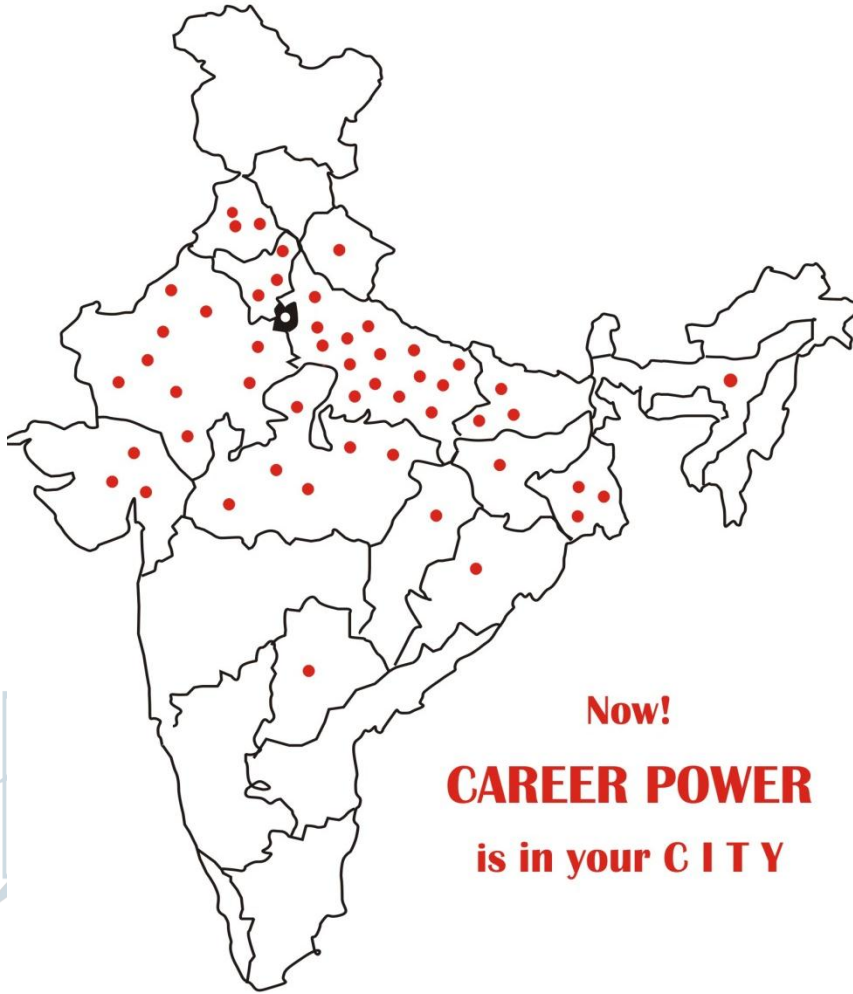
9. What is meant by balance of payments?

Ans: Balance of payments refers to the statement of accounts recording all economic transactions of a given country with the rest of the world.



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